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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,881

11/26/2003

Stephen M. Ferkovich

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05/16/2007

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BELTSVILLE, MD 20705-5131

EXAMINER

WEIER, ANTHONY J

ART UNIT

PAPER NUMBER

1761

MAIL DATE

DELIVERY MODE

05/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,881	FERKOVICH ET AL.	
	Examiner	Art Unit	
	Anthony Weier	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Prior Art

1. It should be noted that the non-patent references set forth in the IDS submitted 11/26/03 have not been considered (or initialed) as copies of these references do not exist in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. Patent No. 5945271) taken together with AgAttack article.

Cohen discloses a protein supplement used to feed insects, such as *Orius insidiosus*, wherein said supplement comprises insect eggs and being in the form of a homogenated paste with particles therein. Cohen further discloses *Ephestia kuehniella* as a source of said insect eggs. In addition, Cohen discloses a supplement which increases the fecundity of the feeding insects. The claims call for the use of insect eggs in an amount that would increase the fecundity of eggs reared on such supplement. Cohen is silent regarding the connection between the use of *Ephestia kuehniella* eggs and fecundity. Nevertheless, the AgAttack article teaches rearing *Orius insidiosus* on a feed including *Ephestia* eggs directly achieves an increase in fecundity. It would have been obvious to one having ordinary skill in the art at the time of the invention to have

Art Unit: 1761

employed the Ephestia eggs of Cohen to achieve such fecundity as taught by AgAttack and to have arrived at an effect amount through routine experimental optimization.

The instant claims further call for said homogenate to have been purified by certain methods. When considering the preparation of a feed product, particularly one with a benefit, it is notoriously well known to provide purification of ingredients to maximize said benefit and remove the presence of contaminants. For example, it is well known to purify food ingredients prior to preparation of foods and delivery to same to the consumer. Likewise, with an insect feed as set forth in Cohen, as modified above, it would have been further obvious to have included a purification of the ingredients including the insect eggs. As for the particular method of purifying as set forth in the instant claims, it is not seen where same would provide for an unexpected results in that the instant claims are drawn to the end product and not the steps of preparing same. It is not seen where such specific purifying means would provide for a patentable distinction with regard to the product of the instant claims. Nevertheless, all of these purification means are notoriously well known, and it would have been further obvious to have employed any one of same as art recognized alternatives.

Response to Arguments

3. Applicant's arguments filed 2/15/07 have been fully considered but they are not persuasive.

Applicant argues that Cohen et al does not teach the use of a protein supplement of *Orius insidiosus* as a homogenated paste. It should be noted, however, that the instant claims call for a protein supplement with insect eggs as a homogenated paste

Art Unit: 1761

that is used to feed *Orius insidiosus*. This is disclosed in Cohen wherein a proteinaceous supplement is used to feed insects such as *Orius insidiosus* (col. 9, line 11) wherein said proteinaceous supplement is in the form of homogenated paste with particles therein (e.g. col. 7, lines 19-35). In addition, Cohen et al discloses the prior art use of insect eggs within said proteinaceous supplement and suggests the use of same in the growth medium (i.e. proteinaceous supplement) set forth by Cohen et al (e.g. col. 3, lines 27-34; col. 6, lines 30-37; col. 9, lines 19-61; col. 13, lines 63-65).

Applicants argues that there is no motivation to combine the teachings of AgAttack to Cohen et al as AgAttack employs a system of two feeding materials (artificial and eggs) rather than one as called for in the instant claims. It should be noted, however, one skilled in the art would understand from AgAttack that the use of insect eggs in combination with an artificial diet increases the fecundity of the insects feeding on same. It should be noted that Cohen et al discloses a feeding material which may include, for example, cells derived from insects (e.g. col. 6, lines 35-37; insect eggs are a source of such cells) and also sets forth the traditional use of *Ephestia kuehniella* as insect feed (e.g. col. 7, line 35). It would have been obvious to one having ordinary skill in the art at the time of the invention to have incorporated *Ephestia* eggs in general to facilitate the added benefit in fecundity attributed to feeding both an artificial and insect egg diet as taught by AgAttack and to have employed *Ephestia kuehniella*, specifically, because same has been traditionally employed for insect diet as set forth in Cohen et al (col. 7, line 35). Furthermore, it would have been obvious to have included the insect egg with the artificial diet as Cohen suggests same (see above; col. 6, lines

Art Unit: 1761

35-37) and because combining same would decrease the work required step of serving two different feed sources. Moreover, there is a reasonable expectation of success in combining both feed sources as both have been used independently and because Cohen et al has provided the suggestion of insect material/artificial diet together (col. 6, lines 35-37). Applicants have not shown that the use of the specific insect eggs and artificial diet in combination would provide an unexpected result over the use of same in separate steps.

All other arguments have been addressed in view of the rejection as set forth above.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

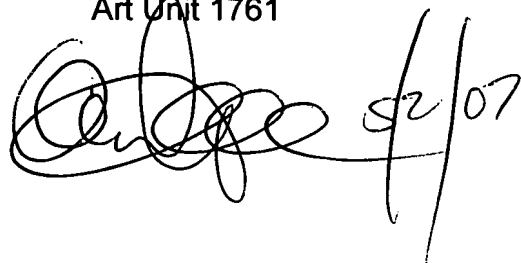
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier
Primary Examiner
Art Unit 1761

Anthony Weier
May 2, 2007

A handwritten signature in black ink, appearing to read 'Anthony Weier', followed by the date '5/2/07' written vertically.